NOC

Section II. Power Limits for Terrestrial Stations

NOC S21.3

(MOD) S21.4 (2) Where compliance with No. **S21.2** for frequency bands between 1 GHz and 10 GHz is impracticable, the maximum equivalent isotropically radiated power (e.i.r.p.) of a station in the fixed or mobile service shall not exceed:

+47 dBW in any direction within 0.5° of the geostationary-satellite orbit; or

+47 dBW to +55 dBW, on a linear decibel scale (8 dB per degree), in any direction between 0.5° and 1.5° of the geostationary-satellite orbit, taking into account the effect of atmospheric refraction[1].

MOD S21.4.1 [1] Information on this subject is given in the most recent version of Recommendation ITU-R SF.765 (see Resolution [COM4-4]).

NOC S21.5 (3) The power delivered by a transmitter to the antenna of a station in the fixed or mobile service shall not exceed: +13 dBW in frequency bands between 1 GHz and 10 GHz, or +10 dBW in frequency bands above 10 GHz.

(MOD) S21.6 (4) The limits given in Nos. **S21.2**, **S21.3**, **S21.4** and **S21.5** apply, where applicable, to the services and frequency bands indicated in Table [AR27bis] for reception by space stations where the frequency bands are shared with equal rights with the fixed or mobile service:

TABLE [AR27bis]

Frequency Band	Service	Limit as specified in Nos.
1 610 - 1 645.5 MHz (No. **S5.359**) 1 646.5 - 1 660 MHz (No. **S5.359**) 1 675 - 1 690 MHz (Region 2) 1 690 - 1 700 MHz (Region 2 countries listed in No. **S5.380**) 1 700 - 1 710 MHz (Region 2) 1 970 - 1 980 MHz (Region 2) 1 980 - 2 010 MHz 2 025 - 2 110 MHz 2 200 - 2 290 MHz 2 655 - 2 670 MHz[1] (Regions 2 and 3) 2 670 - 2 690 MHz 5 725 - 5 755 MHz[1] (Region 1 countries listed in Nos. **S5.453** and **S5.455**) 5 755 - 5 850 MHz[1] (Region 1 countries listed in Nos. **S5.453**, **S5.455** and **S5.456**) 5 850 - 7 075 MHz 7 900 - 8 400 MHz	Fixed-Satellite Meteorological-Satellite Space Research Space Operation Earth Exploration-Satellite Mobile-Satellite	**S21.2, S21.3, S21.4** and **S21.5**
10.7 - 11.7 GHz[1] (Region 1) 12.5 - 12.75 GHz[1] (Nos. **S5.494** and **S5.496**) 12.7 - 12.75 GHz[1] (Region 2) 12.75 - 13.25 GHz 14.0 - 14.25 GHz (No. **S5.505**) 14.25 - 14.3 GHz (Nos. **S5.505**, **S5.508** and **S5.509**) 14.3 - 14.4 GHz[1] (Regions 1 and 3) 14.4 - 14.5 GHz 14.5 - 14.8 GHz	Fixed-Satellite	**S21.2, S21.3** and **S21.5**
17.7 - 18.4 GHz 24.45 - 24.75 GHz 24.75 - 25.25 GHz (Region 3) 25.25 - 29.5 GHz	Fixed-Satellite Inter-Satellite	**S21.2, S21.3** and **S21.5**

NOC S21.6.1

MOD S21.7 Trans-horizon systems in the 1 700 - 1 710 MHz, 1 970 - 2 010 MHz, 2 025 - 2 110 MHz and 2 200 - 2 290 MHz bands may exceed the limits given in Nos. **S21.3** and **S21.5**, but the provisions of Nos. **S21.2** and **S21.4** should be observed. Considering the difficult sharing conditions with other services, administrations are urged to keep the number of trans-horizon systems in these bands to a minimum.

NOC **Section III. Power Limits for Earth Stations**

NOC S21.8 § 4. (1) The equivalent isotropically radiated power (e.i.r.p.) transmitted in any direction towards the horizon by an earth station shall not exceed the following limits except as provided in No. **S21.10** or **S21.11**:

a) in frequency bands between 1 GHz and 15 GHz

+40 dBW in any 4 kHz band for $\theta \leq 0°$

+40 + 3 θ dBW in any 4 kHz band for $0° < \theta \leq 5°$; and

b) in frequency bands above 15 GHz

+64 dBW in any 1 MHz band for $\theta \leq 0°$

+64 + 3 θ dBW in any 1 MHz band for $0° < \theta \leq 5°$,

where θ is the angle of elevation of the horizon viewed from the centre of radiation of the antenna of the earth station and measured in degrees as positive above the horizontal plane and negative below it.

NOC S21.9

NOC S21.10 (3) As an exception to the limits given in No. **S21.8**, the equivalent isotropically radiated power (e.i.r.p.) towards the horizon for an earth station in the space research service (deep space) shall not exceed +55 dBW in any 4 kHz band in frequency bands between 1 GHz and 15 GHz, or +79 dBW in any 1 MHz band in frequency bands above 15 GHz.

NOC S21.11 (4) The limits given in Nos. **S21.8** and **S21.10**, as applicable, may be exceeded by not more than 10 dB. However, when the resulting coordination area extends into the territory of another country, such increase shall be subject to agreement by the administration of that country.

MOD S21.12 (5) The limits given in No. **S21.8** apply, where applicable, to the services and frequency bands indicated in Table [AR27ter] below for transmission by earth stations where the frequency bands are shared with equal rights with the fixed or mobile service:

TABLE [AR27ter]

Frequency band		Services
2 025 - 2 110 MHz		Fixed-satellite
5 670 - 5 725 MHz	(for the countries listed in No. **S5.454** with respect to the countries listed in Nos. **S5.453** and **S5.455**)	Earth exploration-satellite Meteorological-satellite Mobile-satellite Space operation Space research
5 725 - 5 755 MHz[1]	(for Region 1 with respect to the countries listed in Nos. **S5.453** and **S5.455**)	
5 755 - 5 850 MHz[1]	(for Region 1 with respect to the countries listed in Nos. **S5.453**, **S5.455** and **S5.456**)	
5 850 - 7 075 MHz		
7 900 - 8 400 MHz		
10.7 - 11.7 GHz[1]	(for Region 1)	
12.5 - 12.75 GHz[1]	(for Region 1 with respect to the countries listed in No. **S5.494**)	
12.7 - 12.75 GHz[1]	(for Region 2)	
12.75 - 13.25 GHz		
14.0 - 14.25 GHz	(with respect to the countries listed in No. **S5.505**)	
14.25 - 14.3 GHz	(with respect to the countries listed in Nos. **S5.505**, **S5.508** and **S5.509**)	
14.3 - 14.4 GHz[1]	(for Regions 1 and 3)	
14.4 - 14.8 GHz		
17.7 - 18.1 GHz		
27.0 - 27.5 GHz[1]	(for Regions 2 and 3)	Fixed-satellite
27.5 - 29.5 GHz		Earth exploration-satellite
31.0 - 31.3 GHz	(for the countries listed in No. **S5.545**)	Mobile-satellite
34.2 - 35.2 GHz	(for the countries listed in No. **S5.550** with respect to the countries listed in No. **S5.549**)	Space research

NOC S21.12.1

NOC S21.13

NOC **Section IV. Minimum Angle of Elevation of Earth Stations**

NOC S21.14 and S21.15

(MOD) **Section V. Limits of Power Flux-Density from Space Stations**

(MOD) S21.16 § 6. (1) The power flux-density at the Earth's surface produced by emissions from a space station, including emissions from a reflecting satellite, for all conditions and for all methods of modulation, shall not exceed the limit given in Table [AR28]. The limit relates to the power flux-density which would be obtained under assumed free-space propagation conditions and applies to emissions by a space station of the service indicated where the frequency bands are shared with equal rights with the fixed or mobile service, unless otherwise stated.

TABLE [AR28]

Frequency band	Service[a]	Limit in dB(W/m²) for angle of arrival (δ) above the horizontal plane			Reference bandwidth
		0° - 5°	5° - 25°	25° - 90°	
1 670 - 1 700 MHz	Earth Exploration-Satellite Meteorological-Satellite	-133 (value based on sharing with meteorological aids service)			1.5 MHz
1 525 - 1 530 MHz[1](R1, R3) 1 670 - 1 690 MHz[5] 1 690 - 1 700 MHz (Nos. **S5.380, S5.382**) 1 700 - 1 710 MHz 2 025 - 2 110 MHz 2 200 - 2 300 MHz	Meteorological-Satellite (S-E) Space Research (S-E) (S-S) Space Operation (S-E) (S-S) Earth Exploration-Satellite (S-E) (S-S)	-154[3]	-154 + 0.5(δ-5)[3]	-144[3]	4 kHz
2 500 - 2 690 MHz 2 520 - 2 670 MHz 2 500 - 2 516.5 MHz (No. **S5.404**)	Fixed-Satellite Broadcasting-Satellite Radiodetermination-Satellite	-152[3]	-152 + 0.75(δ-5)[3]	-137[3]	4 kHz
3 400 - 4 200 MHz 4 500 - 4 800 MHz 5 670 - 5 725 MHz (Nos. **S5.453 and S5.455**) 7 250 - 7 750 MHz	Fixed-Satellite (S-E) Meteorological-Satellite (S-E) Mobile-Satellite Space Research	-152	-152 + 0.5(δ-5)	-142	4 kHz
6 700 - 6 825 MHz	Fixed-Satellite (S-E)	-137[7]	-137 + 0.5 (δ-5)	-127	1 MHz
6 825 - 7 075 MHz	Fixed-Satellite (S-E)	-154 and -134	-154 + 0.5 (δ-5) and -134 + 0.5 (δ-5)	-144 and -124	4 kHz 1 MHz
8 025 - 8 500 MHz 10.7 - 11.7 GHz	Earth Exploration-Satellite (S-E) Space Research (S-E) Fixed-Satellite (S-E)	-150	-150 + 0.5(δ-5)	-140	4 kHz
12.2 - 12.5 GHz[1] (R3) 12.5 - 12.75 GHz[1] (R1 and R3 countries listed in Nos. **S5.494** and **S5.496**)	Fixed-Satellite (S-E)	-148	-148 + 0.5(δ-5)	-138	4 kHz
17.7 - 19.7 GHz[1, 6] 22.55 - 23.55 GHz 24.45 - 24.75 GHz 25.25 - 27.5 GHz	Fixed-Satellite (S-E) Earth Exploration-Satellite (S-E) Meteorological-Satellite (S-E) Inter-Satellite	-115	-115 + 0.5(δ-5)	-105	1 MHz
31.0 - 31.3 GHz 34.7 - 35.2 GHz (S-E transmissions referred to in No. **S5.550** on the territories of countries listed in No. **S5.549** 37.0 - 40.5 GHz	Fixed-Satellite Mobile-Satellite Space Research	-115[4]	-115 + 0.5(δ-5)[4]	-105[4]	1 MHz

[a] The references to services are those services which have allocations in Article **S5**.

(MOD) S21.16.1 [1] The equality of right to operate when a frequency band is allocated in different Regions to different services of the same category is established in No. **S4.8**. Therefore, any limits concerning inter-Regional interference which may appear in ITU-R Recommendations should, as far as practicable, be observed by administrations.

SUP S21.16.2

(MOD) S21.16.3 [3] These power flux-density values are derived on the basis of protecting the fixed service using line-of-sight techniques. Where a fixed service using tropospheric scatter operates in the bands listed in the first column and there is insufficient frequency separation, there must be sufficient angular separation between the direction to the space station and the direction of maximum radiation of the antenna of the receiving station of the fixed service using tropospheric scatter, in order to ensure that the interference power at the receiver input of the fixed-service station does not exceed –168 dBW in any 4 kHz band.

MOD S21.16.4 [4] The values given in this box shall apply until such time as modified by a competent world radiocommunication conference.

(MOD) S21.16.5 [5] These values are applicable where this band is shared with equal rights with meteorological aids service.

ADD S21.16.6 [6] In the bands 18.9 - 19.3 and 19.3 - 19.6 GHz, these values shall apply for non-geostationary satellite systems, subject to review by ITU-R, and shall apply until they are revised by a competent world radiocommunication conference (see Resolution [COM5-1]).

ADD S21.16.7 [7] These power flux-density limits are subject to review by ITU-R and shall apply until they are revised by a competent world radiocommunication conference.

(MOD) S21.17 (2) The limits given in Table [AR28] may be exceeded on the territory of any country whose administration has so agreed.

*Note by Committe 5 - Provisions A2.1.1 to A2.1.3 (included) of Annex 2 to Resolution 46 (Rev.WRC-95) shall constitute the new Section VI "Coordination Thresholds for the Application of the Provisions of **S9.11bis**" of Article **S21***, the text of which is published in Document 298 (R.4).*

* Amended to "Appendix S5" by the eleventh Plenary meeting.

ADD

Section VI. Coordination Thresholds For the Application of the Provisions of S9.11bis

A2.1 Coordination thresholds for sharing between MSS (space-to-Earth) and terrestrial services in the same frequency bands and between non-GSO MSS feeder links (space-to-Earth) and terrestrial services in the same frequency bands

A2.1.1 Below 1 GHz

In the bands 137 - 138 MHz and 400.15 - 401 MHz, coordination of a space station of the MSS (space-to-Earth) with respect to terrestrial services is required only if the power flux-density produced by the station exceeds -125 dB(W/m^2/4 kHz) at the Earth's surface.

A2.1.2 Between 1 and 3 GHz

A2.1.2.1 Objectives

Generally, power flux-density thresholds were used to determine the need for coordination between space stations of the MSS (space-to-Earth) and terrestrial services. However, to facilitate sharing between digital fixed service (FS) stations and NGSO MSS space stations, the concept of fractional degradation in performance (FDP) was adopted. This concept involves new methods described in this Annex.

As a consequence of this new concept, the need for coordination between space stations of the MSS (space-to-Earth) and terrestrial services is determined using two methods:

- simple method: FDP (**simple** definition of the MSS system and characteristics of **reference** FS stations are used in inputs) or power flux-density trigger value;
- more detailed method: system specific methodology (SSM) (**specific** characteristics of the MSS system and characteristics of **reference** FS stations are used in inputs) as described, for example, in Annex 1 to Recommendation ITU-R IS.1143.

If one of the two methods gives a result that does not exceed the criteria relevant to each method, there is no need for coordination.

If only one method is available in an administration, the result of this method must be taken into account.

A2.1.2.2 General considerations

A2.1.2.2.1 Method for calculating the value of fractional degradation in performance (FDP)

The FDP is used in cases of sharing between digital FS stations with non-GSO MSS stations (space-to-Earth).

To calculate the value of the FDP, the following parameters are needed:

- technical characteristics of digital FS station;
- technical characteristics of non-GSO MSS constellation.

The FDP is calculated:

- by simulating the proposed MSS constellation using the information given in paragraph A.3 of Resolution **46**;
- by positioning the FS station at a certain latitude (each station is assumed to operate at an elevation angle of 0°);
- by calculating for each pointing azimuth (Az) varying between 0° and 360°:
  - at each instant in time of the simulation, the aggregate interference from all visible space stations received at the FS station;
  - the FDP_{Az} for the azimuth Az, using the following formula:

$$FDP_{Az} = \sum_{I_i = \min}^{\max} \frac{I_i f_i}{N_T}$$

- by the following formula:

$$FDP = \max(FDP_{Az})$$

(The formula for FDP applies to the 1 - 3 GHz frequency range only. A different formula may apply at frequencies above 3 GHz.)

where:

I_i = interference noise power level (W)

f_i = the fractional period of time during which the interference power equals I_i

N_T = station receiving system noise power level = kTB (W).

k = Boltzmann's constant = $1.38 \cdot 10^{-23}$ (J/K)

T = FS station receiving system effective noise temperature (T should be calculated by the following formula: $10 \log T = NF + 10 \log T_0$ where NF (dB) is the receiver noise figure given in Annex 1 and T_0 should be assumed as 290 K)

B = reference bandwidth = 1 MHz

NOTE – For the purpose of FDP calculation according to this Annex, it should be assumed that all space stations in the same MSS constellation operate on the same frequencies.

A2.1.2.2.2 Characteristics of reference systems in the fixed service

The following parameters represent the set of reference parameters of the fixed service.

A2.1.2.2.2.1 Characteristics of reference digital point-to-point systems

Three different digital systems are described in this table:

- 64 kbit/s capacity used, for example, for outside-plant (individual subscriber connection);
- 2 Mbit/s capacity used, for example, for business subscriber connections for the local part of the inside-plant;
- 45 Mbit/s capacity used, for example, for trunk networks.

Capacity	64 kbit/s	2 Mbit/s	45 Mbit/s
Modulation	4-PSK	8-PSK	64-QAM
Antenna gain (dB)	33	33	33
Transmit power (dBW)	7	7	1
Feeder/multiplexer loss (dB)	2	2	2
e.i.r.p. (dBW)	38	38	32
Receiver IF bandwidth (MHz)	0.032	0.7	10
Receiver noise figure (dB)	4	4.5	4
Receiver input level for a BER of 10^{-3} (dBW)	-137	-120	-106
Maximum long-term interference Total power (dBW)	-165	-151	-136
Maximum long-term interference Power spectral density (dB(W/4 kHz))	-174	-173	-170

Antenna pattern:

$G(\varphi) = G_{max} - 2.5 \times 10^{-3} \left(\frac{D\varphi}{\lambda}\right)^2$ for $0 < \varphi < \varphi_m$

$G(\varphi) = G_1$ for $\varphi_m \leq \varphi < 75.86(\lambda/D)$

$G(\varphi) = 49 - 10 \log (D/\lambda) - 25 \log \varphi$ for $75.86(\lambda/D) \leq \varphi < 48°$

$G(\varphi) = 7 - 10 \log (D/\lambda)$ for $48° \leq \varphi$

where:

$G(\varphi)$: gain relative to an isotropic antenna (dBi)

φ: off-axis angle (degree)

D: antenna diameter

λ: wavelength expressed in the same unit as D

G_1: gain of the first side-lobe = $2 + 15 \log (D/\lambda)$

(D/λ may be estimated from $20 \log D/\lambda \approx G_{max} - 7.7$)

G_{max}: main lobe antenna gain (dBi)

$\varphi_m = 20 (\lambda/D) \times \sqrt{(G_{max} - G_1)}$ (degrees)

It should be noted that the above antenna radiation pattern corresponds to the average side-lobe pattern and it is recognized that individual side-lobes may exceed it by up to 3 dB.

A2.1.2.2.2.2 Characteristics of reference analogue point-to-point systems

Antenna gain (dBi)	33
e.i.r.p. (dBW)	36
Feeder/multiplexer loss (dB)	3
Receiver noise figure (referred to input of receiver) (dB)	8
Maximum long-term interference per link (20% of time) (dB(W/4 kHz))	-170

Antenna pattern: Use antenna pattern of section 2.2.1.

A2.1.2.2.2.3 Characteristics of reference point-to-multipoint systems

Parameter	**Central station**	**Outstation**
Antenna type	**Omni/Sectoral**	**Dish/Horn**
Antenna gain (dBi)	10/13	20 (analogue) 27 (digital)
e.i.r.p. (max) (dBW) analogue digital	 12 24	 21 34
Noise figure (dB)	3.5	3.5
Feeder loss (dB)	2	2
IF bandwidth (MHz)	3.5	3.5
Maximum permissible long-term interference power (20% time) Total (dBW) dB (W/4 kHz) dB (W/MHz)	 -142 -170 -147	 -142 -170 -147

Antenna pattern:

For the outstation antenna pattern, the reference pattern described in section 2.2.1 has to be used.

The reference radiation pattern for omnidirectional or sectoral antennas is the following:

$$G(\theta) = G_0 - 12\,(\theta/\varphi_3)^2,\ \text{dBi} \qquad 0 \le \theta < \varphi_3$$

$$G(\theta) = G_0 - 12 - 10\log(\theta/\varphi_3),\ \text{dBi} \qquad \varphi_3 \le \theta \le 90°$$

where:

G_0 = maximum gain in the horizontal plane (dBi)

θ is the radiation angle above the horizontal plane (degrees)

φ_3 (degrees) is given by:

$$\varphi_3 = \frac{1}{\alpha^2 - 0.818},\ \text{degrees}$$

where:

$$\alpha = \frac{10^{0.1G_0} + 172.4}{191}$$

It should be noted that the above antenna pattern is provisional and that further study is under way in the ITU-R.

A2.1.2.3 Determination of the need for coordination between MSS space stations (space-to-Earth) and terrestrial stations

A2.1.2.3.1 Method for the determination of the need for coordination between MSS space stations (space-to-Earth) and other terrestrial services sharing the same frequency band in the 1 to 3 GHz range

Coordination of space stations of the mobile-satellite service downlink with respect to terrestrial services is not required if the power flux-density produced at the Earth's surface or the fractional degradation in performance (FDP) of a station in the fixed service does not exceed the threshold values shown in the table.

Frequency band (MHz)	Service to be protected	Coordination threshold values				
		Geostationary space stations		Non-geostationary space stations		
		pfd (per space station) calculation factors (NOTE 2)		pfd (per space station) calculation factors (NOTE 2)		% FDP (in 1 MHz) (NOTE 1)
		P dB(W/m^2) in 4 kHz	r dB/deg	P dB(W/m^2) in 4 kHz	r dB/deg	
1 492 - 1 525	analogue FS	-152	0.5	-152	0.5	
	digital FS	-152	0.5			25
	other terrestrial services (NOTE 4)	-152	0.5	-152	0.5	
1 525 - 1 530	analogue FS	-152	0.5	-152	0.5	
	digital FS	-152	0.5			25
	other terrestrial services (NOTE 4)	-152	0.5	-152	0.5	
2 160 - 2 200 (NOTE 3)	analogue FS	-152	0.5	-147	0.5	
	digital FS	-152	0.5			25
	other terrestrial services (NOTE 4)	-152	0.5	-147	0.5	
2 483.5 - 2 500	fixed	-152	0.5	-150	0.65	
	other terrestrial services (NOTE 4)	-152	0.5	-150	0.65	
2 500 - 2 520	analogue FS	-152	0.5	-152	0.5	
	digital FS	-152	0.5			25
	other terrestrial services (NOTE 4)	-152	0.5	-152	0.5	
2 520 - 2 535	analogue FS	-160	0.75	-152	0.5	
	digital FS	-160	0.75			25
	other terrestrial services (NOTE 4)	-160	0.75	-152	0.5	

NOTE 1 – The calculation of FDP (fractional degradation in performance) is contained in section 2.1, using reference FS parameters contained in sections 2.2.1 and 2.2.3.

NOTE 2 – The following formula should be used for deriving the coordination threshold in terms of power flux-density:

P dB(W/m^2/4 kHz)	for $0° \leq \delta \leq 5°$
P + r(δ-5) dB(W/m^2/4 kHz)	for $5° < \delta < 25°$
P + 20r dB(W/m^2/4 kHz)	for $25° \leq \delta \leq 90°$

where δ is the angle of arrival (degrees).

The threshold values are obtained under assumed free-space propagation conditions.

NOTE 3 – The coordination threshold in the band 2 160 - 2 270 MHz (Region 2) and 2 170 - 2 200 MHz (all regions) to protect other terrestrial services does not apply to the terrestrial component of the Future Public Land Mobile Telecommunication Systems (FPLMTS), as the satellite and the terrestrial components are not intended to operate in the same area or on common frequencies within these bands.

NOTE 4 – The coordination threshold factors applicable to other terrestrial services may be reviewed at a future conference, as necessary.

A2.1.2.3.2 A system-specific methodology (SSM) to be used in determining the need for detailed coordination of NGSO MSS (space-to-Earth) systems with fixed service systems

The purpose of the system-specific methodology (SSM) is to allow a detailed assessment of the need to coordinate frequency assignments to non-GSO MSS space stations (space-to-Earth) with frequency assignments to receiving stations in an FS network of a potentially affected administration. The SSM takes into account specific characteristics of the non-GSO MSS system and reference FS characteristics.

Those administrations planning to establish the need for coordination between non-geostationary-satellite networks in the mobile-satellite service and fixed service systems are encouraged to use Recommendation ITU-R IS.1143. While urgent additional development work is being undertaken in the ITU-R to facilitate the use of the methodology described in Recommendation ITU-R IS.1143, administrations may be able to effect coordination by applying this system-specific methodology.

A2.1.3 Above 3 GHz

In the band 15.45 - 15.65 GHz, when an administration proposes to use a non-geostationary space station whose emissions exceed -146 dB(W/m^2/MHz) for all angles of arrival, it shall coordinate with affected administrations.

ARTICLE S22 - Space Services

RR	VGE proposal	VGE Report	WRC-95 decision
2612		S22.1	
2613		S22.2	MOD
2613A		S22.3	
2614		S22.4	
2631	(MOD)	S22.5	
		S22.5bis	ADD
2615		S22.6	
2616		S22.7	
2617		S22.8	
2618		S22.9	
2619		S22.10	
2620		S22.11	
2621		S22.12	
2622		S22.13	
2623		S22.14	
2624		S22.15	
2625		S22.16	
2626		S22.17	
2627		S22.18	
2628		S22.19	
2629		S22.20	
2630		S22.21	
2631	(MOD)	S22.5	
2632		S22.22	
2633		S22.23	
2634		S22.24	
2635		S22.25	
2636	(MOD)	S22.26	
2637 - 2663 not allocated			
FOOTNOTES			
	ADD	A.S22.1	
2613.1	SUP	--	
2614.1	SUP	--	
A.29 S.III.1		A.S22.S.III.1	
2615.1		S22.6.1	

RR	VGE proposal	VGE Report	WRC-95 decision
2619.1	SUP	--	
2623.1	SUP	--	
2624.1		S22.15.1	
2627.1	SUP		
2628.1		S22.19.1	
2630.1	SUP		
2632.1		S22.22.1	
2632.2	(MOD)	S22.22.2	

ARTICLE S22

NOC

Space Services[1]

MOD A.S22.1

[1] In applying the provisions of this Article, the level of accepted interference (see No. **S1.168**) shall be fixed by agreement between the administrations concerned, using the relevant ITU-R Recommendations as a guide.

NOC

Section I. Cessation of Emissions

NOC S22.1

§ 1. Space stations shall be fitted with devices to ensure immediate cessation of their radio emissions by telecommand, whenever such cessation is required under the provisions of these Regulations.

NOC

Section II. Control of Interference to Geostationary-Satellite Systems

MOD S22.2

§ 2. Non-geostationary space stations shall cease or reduce to a negligible level their emissions, and their associated earth stations shall not transmit to them, whenever there is unacceptable interference to geostationary-satellite space systems in the fixed-satellite service operating in accordance with these Regulations.

NOC S22.3 to S22.5

ADD S22.5bis

§ 6. (1) In the frequency band 6 700 - 7 075 MHz, the maximum aggregate power flux-density produced at the geostationary-satellite orbit and within ±5° of inclination around the geostationary-satellite orbit by a non-geostationary-satellite system in the fixed-satellite service shall not exceed -168 dB(W/m^2) in any 4 kHz band.

NOC S22.6 to S22.26

ARTICLE S23 - Broadcasting Services

RR	VGE proposal	VGE Report	WRC-95 decision
2664		S23.1	
2665		S23.2	
2666		S23.3	
2667		S23.4	
2668		S23.5	
2669		S23.6	
2670		S23.7	
2671		S23.8	
2672		S23.9	
2673		S23.10	
2673A		S23.11	
2673B		S23.12	
2674		S23.13	
2675 - 2699 not allocated			

ARTICLE S24 - Fixed Service

RR	VGE proposal	VGE Report	WRC-95 decision
2700		S24.1	
2701		S24.2	
2702	(MOD)	S24.3	
2703	(MOD)	S24.4	
2704	(MOD)	S24.5	
2705	(MOD)	S24.6	
2706 - 2730 not allocated			

ARTICLE S23

NOC **Broadcasting Services**

NOC **S23.1**
to
S23.13

ARTICLE S24

NOC **Fixed Service**

NOC **S24.1**
to
S24.6

ARTICLE S25 - Amateur Services

RR	VGE proposal	VGE Report	WRC-95 decision
2731		S25.1	
2732		S25.2	
2733		S25.3	
2734		S25.4	
2735		S25.5	
2736		S25.6	
2737		S25.7	
2738	(MOD)	S25.8	
2739		S25.9	
2740		S25.10	
2741	(MOD)	S25.11	
2742 - 2766 not allocated			

ARTICLE S25

NOC **Amateur Services**

NOC **S25.1**
to
S25.11

ARTICLE S26 - Standard Frequency and Time Signal Service

RR	VGE proposal	VGE Report	WRC-95 decision
2767		S26.1	
2768	MOD	S26.2	
2769	(MOD)	S26.3	
2770	(MOD)	S26.4	MOD
2771	(MOD)	S26.5	
2772	(MOD)	S26.6	
2773 - 2797 not allocated			

ARTICLE S27 - Experimental Stations

RR	VGE proposal	VGE Report	WRC-95 decision
2798		S27.1	
2799		S27.2	
2800	SUP	--	
2801		S27.3	
2802		S27.4	
2803	(MOD)	S27.5	
2804		S27.6	
2805		S27.7	
2806 - 2830 not allocated			

ARTICLE S26

NOC **Standard Frequency and Time Signal Service**

NOC **S26.1**

NOC **S26.2** (2) To this end, each administration shall take steps to coordinate, with the assistance of the Bureau, any new standard frequency or time signal transmission or any change in existing transmissions in the standard frequency bands. For this purpose, administrations shall exchange between themselves, and furnish to the Bureau, all relevant information. On this matter, the Bureau shall consult other international organizations having a direct and substantial interest in the subject.

NOC **S26.3**

MOD **S26.4** § 2. Administrations shall cooperate in reducing interference in the frequency bands to which the standard frequency and time signal service is allocated.

NOC **S26.5 and S26.6**

ARTICLE S27

NOC **Experimental Stations**

NOC **S27.1 to S27.7**

ARTICLE S28 - Radiodetermination Services

RR	VGE proposal	VGE Report	WRC-95 decision
2831		S28.1	
2832		S28.2	
2833	(MOD)	S28.3	
2834		S28.4	
2835		S28.5	
2836		S28.6	
2837		S28.7	
2838		S28.8	
2839		S28.9	
2840		S28.10	
2840A		S28.11	
2841		S28.12	
2842		S28.13	
2842A		S28.14	
2843		S28.15	SUP
2844		S28.16	
2845		S28.17	
2846	SUP	--	
2847		S28.18	
2848		S28.19	
2849		S28.20	
2850		S28.21	
2851		S28.22	
2852		S28.23	
2852bis	ADD	S28.24	
2853 - 2865	SUP*	Ap. S12	
2866	SUP Mob-83	--	
2867 - 2891 not allocated			